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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/727,103 | 11/29/2000 | William F. Foote | SUN1P263/P4459 | 6819 |

22434 7590 10/07/2003

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| EXAMINER |
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ANYA, CHARLES E

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| ART UNIT | PAPER NUMBER |
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2126

DATE MAILED: 10/07/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicati n N .

09/727,103

Applicant(s)

FOOTE ET AL.

Examiner

Charles E Anya

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 10.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claim 1 is objected to because of the following informalities:

Claims 1 and 8 recites the phrase "when ~~the~~ each argument".

For the purpose of this office action the Examiner would assume that the phrase "when the each argument" means "when each argument".

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1 – 7 and 9 – 15 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Pat. No. 2003/0069922 A1 to Arunachalam.

As to claim 1, Arunachalam teaches a method of executing a remote method ("...remote procedure or method call..." page 10 paragraph 0111), wrapping each argument of a remote method when each argument is a remote object ("...by reference..." page 10 paragraph 0111, "..._ref..." page 12 paragraph 0151, page 15 paragraph 0231, page 16 paragraphs 0234 and 0235), copying each argument of the remote method when each is not a remote object/invoking the remote method using

each wrapped or copied argument (“...specified by value...” page 10 paragraph 0111, “..._val...” page 12 paragraph 0151 page 16 paragraphs 0242 and 0243), wrapping the result of the invoked remote method when the result is a remote object and copying the result of the remote method is not a remote object (“...return type...” page 12 paragraph 0152, page 13 paragraph 0169, page 16 paragraphs 0244 and 0245, page 16 paragraphs 0256 and 0257).

As to claim 2, Arunachalam teaches the argument or result as a remote object when its declared class implements a remote marker interface (APIs page paragraph 0111).

As to claim 3, Arunachalam teaches wrapping or copying the result only when an invocation thread associated with invoking the remote method is not being terminated and throwing an exception on the remote method when the invocation thread is terminated (An Exception Handling/Thread Rendezvous Layer 1650 page 10 paragraph 0113, “...throwing a exception...” page 11 paragraph 0132,0133, page 17 paragraphs 0301 and 0302).

As to claims 4 and 7, see the rejection of claim 1.

As to claim 5, Arunachalam teaches creating the wrapper object for each argument/the result that includes finding or generating a remote stub class/creating an instantiation of the remote stub class (Stub 1830 page 13 paragraph 0168) and setting a data member within the remote stub to refer to the argument or result (page 12 paragraph 0151, page 16 paragraph 0242 – 0245).

As to claim 6, Arunachalam teaches generating the remote stub class that includes generating a class name/adding a method implementation for each method of a class of the argument or result being wrapped into a class definition array (page 16 paragraphs 0252 and 02253) and also see the rejection of claim 1.

As to claims 9 – 15, see the rejection of claims 1 – 7 respectively.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 8 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 2003/0069922 A1 to Arunachalam in view of Hawblitzel et al. (Implementing Multiple Protection Domains in Java pages 1 – 15).

As to claim 8, claim 3 covers claim 8 except for serializing each argument or the result into a byte array when each argument or the result implements serialization and deserializing the argument or result with respect to a target class loader associated with code that will use the copy of each argument or the result when each argument or the result implements serialization.

Arunachalam teaches serializing each argument or result into a byte array when each argument or the result implements serialization (page 11 paragraphs 0130 and 0131, page 16 paragraphs 0246 and 0247).

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Although deserialization is inherent after serialization Arunachalam does not explicitly teach deserialization.

Hawblitzel teaches deserialization (page 8 lines 16 – 24). It would have been obvious to apply the teaching of Hawblitzel to the system of Arunachalam. One would have been motivated to make such a modification in order to copy an argument (Col. 8 lines 16 – 24).

As to claim 16, see the rejection of claim 8.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles E Anya whose telephone number is (703) 305-3411. The examiner can normally be reached on M-F (8:30-5:30) First Friday off.

The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.



JOHN FOLLANSBEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

Charles E Anya
Examiner
Art Unit 2126